

S.N. 10/619,687

Atty Docket BRI/018

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-10. (canceled)

11. (amended) An electrically-connected system for modulation-based talkback from a slave device to a master device comprising:

- a) a master device
- b) a bus; and,
- c) more than at least one slave device configured and/or programmed to transmit data to said master device through current modulation-based talkback, wherein said current modulation-based talkback includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device; wherein the system has a background level of current draw noise and has a low voltage state and a high voltage state, and is configured and/or programmed to hold the voltage level of the system low such that the background level of current draw noise in said system is held low when it is desired that a slave device talkback to said master device; ~~wherein said system is an electronic blasting system and said slave device is an electronic detonator.~~

12-14. (canceled)

15. (previously presented) The electrically-connected system of claim 11, wherein said system is an electronic blasting system, said slave device is an electronic detonator, and ~~wherein said master device is a blasting machine.~~

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16. (amended) A slave device for use in an electrically connected system including a master device, a bus, and more than one slave device, and having a background level of current draw noise and a low voltage state and a high voltage state, said device configured and/or programmed to talkback to said master device by current modulation, wherein said current modulation includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device, and wherein said device is further configured and/or programmed to talkback to said master device when the voltage level of said system is held low such that said background level of current draw noise in said system is low, ~~wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.~~
- 17-20. (canceled)
21. (previously presented) A method of modulation-based talkback from a slave device to a master device comprising the step of using the electrically-connected system of claim 11.
22. (previously presented) The method of claim 21, wherein said method includes the step of establishing a limitation in said electrically-connected system to prevent all slave devices, other than a slave device that is talking back to the master device, from drawing current above a predetermined maximum noise level below which accurate reception of talkback data by the master device is ensured.
23. (amended) The method of claim 22, wherein said step of establishing a limitation in said electrically-connected system includes the step of providing in said slave devices a storage capacitor and a communication interface that includes one or more full wave rectifier bridge diodes.

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24. (amended) The method of claim 22, wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.
25. (amended) The method of claim 23, wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.
- 26-27. (canceled)
28. (previously presented) The electrically-connected system of claim 11, wherein said slave device includes a storage capacitor and a communication interface.
29. (canceled)
30. (previously presented) The electrically-connected system of claim 11, wherein said system is configured and/or programmed such that only a slave device that is talking back to the master device can draw current above a predetermined maximum noise level.
31. (previously presented) The electrically-connected system of claim 11, wherein said current modulation-based talkback utilizes digital data representation.
32. (previously presented) The slave device of claim 16, wherein said slave device is configured and/or programmed so that it can only draw current above a predetermined maximum noise level when it is talking back to the master device.
33. (previously presented) The slave device of claim 16, wherein said slave device includes a storage capacitor and a communication interface.

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34. (amended) The slave device of claim 16, wherein said communication interface includes one or more full wave rectifier bridge diodes.
35. (new) The system of claim 11, wherein said system is configured and/or programmed to prevent communications from the master device to slave devices from occurring simultaneously with communications to the master device from slave devices.
36. (new) The system of claim 15, wherein said system is configured and/or programmed to prevent communications from the master device to slave devices from occurring simultaneously with communications to the master device from slave devices.
37. (new) The system of claim 24, wherein said system is configured and/or programmed to prevent communications from the master device to slave devices from occurring simultaneously with communications to the master device from slave devices.
38. (new) The slave device of claim 16, wherein said system and/or slave device is configured and/or programmed to prevent communications from the master device to slave devices from occurring simultaneously with communications to the master device from slave devices.
39. (new) The slave device of claim 16, wherein said system is an electronic blasting system, and said slave device is an electronic detonator.
40. (new) The slave device of claim 33, wherein said system is an electronic blasting system, and said slave device is an electronic detonator.